

Appendix A: South Carolina



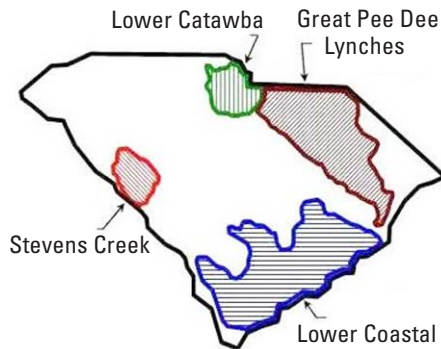
Over 40 animal and plant species are listed as federally endangered or threatened within South Carolina. Additionally, three species are candidates for listing and are not currently receiving federal protection. Numerous species of plants and animals are of special concern and are undergoing review for listing.

Introduction and Overview

South Carolina is divided into four main physiographic provinces including the Blue Ridge Mountains, Piedmont, Carolina Sandhills and Coastal Plain provinces. The Coastal Zone is often included as part of the Coastal Plain. Two major types of river systems traverse these provinces. Alluvial rivers originate in the mountains and piedmont and include the Great Pee Dee, Savannah, Broad, Saluda, Congaree, Wateree, Catawba and Santee. Blackwater rivers originate in the coastal plain and include the Cooper, Ashley, Edisto, Salkahatchie, Combahee, Ashepoo, New, Four Holes, Little Pee Dee, Waccamaw, Black and Lumber.

A considerable acreage of tidal freshwater swamp and marsh are associated with these major river systems. In addition, South Carolina has numerous palustrine wetlands that are isolated or contiguous with freshwater streams and river systems. The river basins drain into an extensive estuarine network of saltwater marsh with tidal creeks, inlets and sounds intermixed with barrier, sea and marsh islands. The estuarine system provides tremendous nursery grounds for commercially important fish and shellfish and fuels the base of the marine food chain.

South Carolina supports large populations of wading birds, shorebirds, waterfowl, land birds, game and non-game mammals, reptiles, amphibians and fish. Forage, refuge, cover and staging areas for a variety of migrating waterfowl, neotropical migrants, raptors and shorebirds are provided. The several species of flora and fauna listed as federally endangered or threatened in the State are indicative of the development pressures and habitat loss incurred.

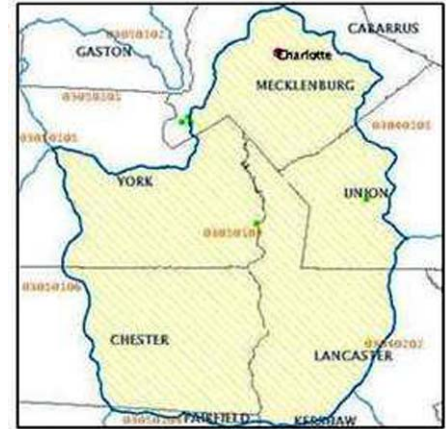


Overview of Focus Areas

For this strategic plan we have established four priority habitat geographic focus areas in South Carolina. These are Lower Catawba, Great Pee Dee-Lynches, Stevens Creek, and Lower Coastal. These areas were chosen based on species of greatest concern as listed in the South Carolina Comprehensive Wildlife Conservation Strategy and the presence of federally listed species. Two of these focus areas, Great Pee Dee-Lynches and Lower Coastal, are areas in which past Partners program work is concentrated, there is significant stakeholder interest, and there is an expected likelihood of successful accomplishments. The other two focus areas, Lower Catawba, and Stevens Creek are areas in which little Program work has taken place, and in which we would like to increase our work to address species of greatest concern.

Lower Catawba Focus Area

The Lower Catawba focus area is located in the Piedmont region, in the north-central part of the state of South Carolina. Habitats within the focus area include upland forest, Piedmont small stream forest, river bottom, cove forest, and grassland/early succession habitats.



Lower Catawba Focus Area



Riparian zone in Lower Catawba Focus Area degraded by livestock grazing and watering practices

Five Creeks within the watershed are known to contain populations of the endangered Carolina Heelsplitter. Anticipated Partners Program contribution is improvement of stream habitat by restoration of forest riparian corridors on sites with poor agricultural or forestry practices.

Priority Habitat Riparian

Five-Year Target (FY 2007-2011)
0.25 mile

*Focus Species**
Carolina heelsplitter (E)

Threats

Siltation from poor agricultural practices, residential and commercial development, road construction and maintenance, discharge of pollutants, habitat alterations, and other natural and human-related factors



Great Pee Dee-Lynches Focus Area



Degraded sandhill habitat in the Great Pee Dee-Lynches Focus Area one year after replanting with longleaf pine



Historic rice field managed tidal wetland

Action Strategies

Work with private landowners and other partners to identify degraded sites and potential projects, develop habitat improvement plans, and implement actions using all available conservation programs. Activities include fencing livestock out of streams, providing alternate watering sources, installing heavy use area protection in streams, and revegetate as needed.

Great Pee Dee – Lynches Focus Area

This focus area includes South Carolina portions of the watersheds of the Great Pee Dee River and the Lynches River. The Lynches River is a tributary of the Great Pee Dee River. The extreme upper portion of the focus area is in the Piedmont and the majority of the focus area is in the coastal plain. These river corridors include important bottomland hardwood forest. The region has a high concentration of Carolina bay wetlands which have been converted to other uses. The upland areas include xeric sandhills and mesic flatwoods. A portion of the upper Lynches drainage contains populations of the endangered Carolina Heelsplitter, while the bottomland hardwoods are habitat for numerous migratory bird species. Historically, much of the uplands were longleaf pine forest. Scattered longleaf remain, along with some populations of the endangered red-cockaded woodpecker. Agriculture and timber production is abundant in the focus area. Some agriculture and timber production practices have resulted in reduction of quality wildlife habitat. The extreme lower end of the focus area includes large areas of managed tidal wetlands. Anticipated program contribution in this focus area is longleaf pine forest restoration, riparian restoration, and wetland restoration and enhancement. This work will complement the South Carolina Comprehensive Wildlife Conservation Strategy as well as activities of Carolina Sandhills National Wildlife Refuge, Waccamaw National Wildlife Refuge, State Wildlife Management Areas, and privately owned protected land.

Priority Habitat

Wetland

Five-Year Target (FY 2007-2011)

140 acres

Focus Species*

Bald eagle (T); wood stork (E)

Threats

Abandonment of management on tidal wetlands

Action Strategies

Work with private landowners and other partners to develop and carry out voluntary projects in tidal wetlands. Share management costs on deteriorated rice trunk water-control structures and provide technical assistance.

Priority Habitat

Upland: Longleaf Pine

Five-Year Target (FY 2007-2011)

1,000 acres

Focus Species*

Red-cockaded woodpecker (E); Bachman's sparrow (SOC)

Threats

Loss of longleaf pine habitat, lack of prescribed burning, and residential and commercial development

Action Strategies

Work with private landowners and other partners in developing and implementing voluntary projects utilizing all available conservation programs to restore or improve longleaf pine stands on appropriate sites. Practices include thinning, prescribed burning, vegetation control using herbicides, establishing and maintaining firebreaks, planting longleaf pine and native ground cover.

Priority Habitat

Riparian

Five-Year Target (FY 2007-2011)

0.5 mile

Focus Species*

Carolina heelsplitter (E); swallow-tailed kite (SOC)

Threats

Development; poor forestry and agricultural practices

Action Strategies

Work with private landowners and other partners to develop and implement voluntary habitat improvement projects utilizing all available conservation programs. Activities include fencing livestock out of streams, providing alternate watering sources, installing heavy use protection in streams, revegetation as necessary.



Stevens Creek Focus Area

Stevens Creek Focus Area

The Stevens Creek focus area is located in west-central South Carolina. Sumter National Forest comprises a large portion of the watershed. Habitats within the focus area include upland forest, Piedmont small stream forest, and grassland/early succession habitats. The endangered Carolina Heelsplitter has been found in five creeks within the focus area. Anticipated Partners program contribution is improvement of stream habitat by restoration of forested riparian corridors on sites containing poor agricultural or forestry practices.

Priority Habitat
Riparian

Five-Year Target (FY 2007-2011)
0.25 mile

Focus Species
Carolina Heelsplitter (E)

Threats
Siltation from poor agricultural and forestry practices, residential and commercial development, road construction and maintenance, discharge of pollutants, habitat alterations, and other natural and human-related factors.

Action Strategies
Work with private landowners and other partners to develop and implement voluntary habitat improvement projects utilizing all available conservation programs. Activities include fencing livestock out of streams, providing alternate watering sources, installing heavy use area protection in streams, and revegetation as necessary.



Lower Coastal Focus Area

Lower Coastal Focus Area

The Lower Coastal focus area is comprised of five watersheds adjacent to the South Carolina coast, between but not including the Savannah River to the south and the Black River to the north. Primary habitat types in the focus area targeted for habitat improvement actions through the Partners program are mesic flatwoods longleaf pine forest, mesic savanna longleaf pine forest, and tidal managed wetland impoundments. These wetlands were converted for rice cultivation in the 19th century and have been maintained and managed for wildlife since around 1900. These managed wetlands are important for a variety of migratory birds including shorebirds, waterfowl, and passerine birds, many of which are at-risk or listed species. Many of the sites link together with other sites of similar habitat, protected by private ownership conservation easements or as state and federal conservation lands. Program projects involve structural work needed to enhance, maintain and manage the wetlands.

Priority Habitat
Upland: Longleaf Pine

Five-Year Target (FY 2007-2011)
1,000 acres

Focus Species
Red-cockaded woodpecker (E);
Bachman's sparrow (SOC)

Threats
Loss of longleaf pine habitat; lack of prescribed burning and other management; residential and commercial development



New rice-trunk water control structure replaced a deteriorated, nonfunctional structure on this managed tidal wetland in the Lower Coastal Focus Area

Action Strategies

Work with private landowners and other partners to develop and implement longleaf pine habitat improvement actions utilizing all available conservation programs. Activities include prescribed burning, thinning of stands, use of herbicides, establishing and maintaining firebreaks, and planting longleaf pine and native ground cover species.

Priority Habitat
Wetland: Tidal

Five-Year Target (FY 2007-2011)
100 acres

Focus Species
Wood stork (E); bald eagle (T);
Canby's dropwort (E)

Threats
Abandonment of sound management practices in tidal wetlands and lack of prescribed burning

Action Strategies

Work with private landowners and other partners to develop and implement voluntary habitat improvement projects in tidal wetlands utilizing all available conservation programs. Activities include replacement of deteriorated rice trunk water-control structures, prescribed burning of certain wetland habitats for Canby's dropwort.

*E=federal listed endangered species; T=federal listed threatened species; C=federal candidate species; SOC=species of concern



USFWS

A colonial waterbird rookery in the Lower Coastal Focus Area, dominated by wood storks and threatened by aquatic emergent vegetation

Stakeholders Involved

The following is a list of stakeholders involved in the Partners Program in South Carolina. Three of these stakeholders have provided comments and recommendations concerning the program for the next five years. The stakeholders are involved in carrying out program activities in varying degrees; however, to some extent all participate in supporting the program. Support is by providing by technical assistance, locating potential projects, managing finances, and general promotion of the program.

- Private Landowners (approximately 50)
- Bamberg Conservation District
- Bear Island Hunting Club
- Bishop Gravatt Center
- Brookgreen Gardens
- Catawba Indian Nation
- Charleston Natural History Society
- Chapin High School
- Ducks Unlimited, Inc.
- Foothills RC&D Council, Inc.
- Greenlawn Baptist Church
- Lowcountry RC&D Council
- National Audubon Society
- National Fish and Wildlife Foundation

- Natural Resources Conservation Service
- Silver Bluff Plantation Sanctuary
- S.C. Chapter of The Wildlife Society
- S.C. Department of Corrections
- S.C. Department of Natural Resources
- South Carolina Native Plant Society
- South Carolina Waterfowl Association
- Star Bluff Hunting Club
- Telephone Pioneers of America
- The American Chestnut Foundation
- The Nature Conservancy
- Trinity Collegiate School
- Trout Unlimited
- University of South Carolina
- West Ashley High School
- Woodfield Land & Timber, LLC
- Woodlands, LLC

References

South Carolina Comprehensive Wildlife Conservation Strategy [Online]. South Carolina Department of Natural Resources. <http://www.dnr.sc.gov/cwcs> (Accessed 25 Aug. 2006)

U.S. Fish and Wildlife Service. 2005. Five year strategic plan (2006 – 2011). Charleston Ecological Services Field Office, Charleston, SC. October 2005

Natural Resources Conservation Service, U.S. Fish and Wildlife Service, South Carolina Department of Natural Resources, Ducks Unlimited Inc, and Lowcountry RC&D Council. 2004. Memorandum of understanding for cooperation relating to the South Carolina partners project.

Habitat Information Tracking System [Online]. U.S. Fish and Wildlife Service. <http://ecos.fws.gov/habits/Welcome.do> (Accessed 25 Aug. 2006)